

# Precision Agrichemical Application

## Definition/Purpose

Precision Agrichemical Application means using a system of components that enable reduction and greater control of fertilizer and pesticide application. This is accomplished through avoidance of excessive overlapping, unnecessary application to end/turn rows, and more precise control of application rates (DIP).

## Policies

1. Cost share for this practice shall be based upon actual cost with a cap. The cap for each tier is additive upon the previous tier. It is acceptable for an applicant who has already adopted a lower tier to receive cost share to adopt higher tiers and receive cost share up to the incremental cap(s).
2. This practice can be used to either retrofit existing application equipment or to replace existing equipment with new equipment with precision technology.
3. The applicable cost share cap for this practice shall be based upon the capabilities of the system according to the following tiers (To qualify for the higher tiers, the applicant must also implement or have already adopted all of the lower tiers):
  - a. GPS guidance system
    - i. Guidance system must have at least sub-meter pass-to-pass accuracy
    - ii. System must include capability to compensate for tilt if used on slopes > 4%.
  - b. Automatic Application Rate Control
    - i. Rate control system must be capable of recording application rate data and producing application map
    - ii. Must include automatic correction for ground speed and number of boom sections being used.
  - c. Boom section control
    - i. Guidance system must have at least decimeter pass-to-pass accuracy
    - ii. The system must have enough controls that each independently-controlled section is no more than 15 feet in length.
4. Before applicant can receive payment for this practice, he must demonstrate operation of the equipment while applying agrichemicals.
5. For spot checks the district staff should either observe the cooperator using the equipment for agrichemical application or review the data stored or downloaded by the control system to insure the system is being used.
6. The cooperator may upgrade any component of the precision application system without additional cost share during the maintenance period, as long as the upgraded system has components that are equivalent or better than the system originally cost shared.
7. This practice is limited to one system per cooperator. However, a cooperator is free to utilize components of the system on multiple pieces of equipment, provided the cooperator can produce the cost shared components for spot checks with adequate advance notice.

### Specifications

ISO 12188 Tractors and machinery for agriculture and forestry — Test procedures for positioning and guidance systems in agriculture

Recommended caps:

<b>Precision Agrichemical Application Tier</b>	<b>Proposed ACSP Cap (75 / 90%) Caps for higher tiers are additive upon lower tiers</b>
a. GPS guidance system	\$2,250 / \$2,700
b. Automatic Application Rate Control	\$1,500 / \$1,800
c. Boom section control	\$1,250 / \$1,500